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PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see Form PCT/ISA/210 (sheet 2)

Applicant's or agent's file reference
see Form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/FR2004/002507

International filing date (day/month/year)
05.10.2004

Priority date (day/month/year)
06.10.2003

International Patent Classification (IPC) or both national classification and IPC
G06T1/00

Applicant
MBDA FRANCE

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires earlier.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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Box No. I. Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/FR2004/002507

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Statement

Novelty	Yes:	Claims	1-7
	No:	Claims	
Inventive Step	Yes:	Claims	
	No:	Claims	1-7
Industrial Applicability	Yes:	Claims	1-7
	No:	Claims	

2. Citations and explanations

see separate sheet

1. The present notification makes mention of the following documents cited in the search report. The serial numbers allocated thereto hereinbelow will be used throughout the proceedings:

D1: EP-A-0 447 080 (ATOMIC ENERGY AUTHORITY UK) 18 September 1991

D2: US-A-4 637 571 (HOLDER DONALD W ET AL) 20 January 1987

D3: US-A-4 796 834 (AHLSTROEM LARS G W) 10 January 1989

2. CLAIM 1

2.1 Clarity

The term "rigidly" used in claims 1 and 2 is equivocal and leaves some doubt as to the meaning of the technical characteristic to which it refers. The subject matter of said claims is therefore not clearly defined (PCT Article 6).

- 2.2 Additionally, despite the lack of clarity mentioned above, the subject matter of claim 1 does not involve an inventive step in the sense of PCT Article 33(3); consequently, the conditions stated in PCT Article 33(1) are not fulfilled.

Document D1 which is regarded as the closest state of the art, describes (the references between parentheses apply to this document):

A method for the formation, on a display stationed at a fixed post (claim 8), of successive images of a scene towards which a flying body (claim 1) is moving while rotating about its longitudinal axis (fig. 1; col. 2, line 53 - col. 3, line 4), said flying body communicating with said fixed post by virtue of linking means (claim 1), characterized in that:

- a picture-taking apparatus is fixed to the front of said flying body, in such a way that said apparatus turns with said flying body about said longitudinal axis (fig. 1);
- in each picture, other than the reference picture, a geometrical image transformation processing is applied to the image of said scene so that the relative position of the transformed image of said scene with respect to the contour is similar to said relative reference position; (col. 2, line 53 - col. 3, line 4) and

- said reference picture and said pictures having undergone said geometrical image transformation processing are displayed successively on said display (cf. col. 2, line 53 - col. 3, line 4).

Consequently, the subject matter of claim 1 differs from this known method in that: the acquisition of images is obtained at predetermined angular positions.

The problem that the present invention is intended to solve may therefore be considered as being to facilitate the angular registration of successive images of a scene under rotation. The solution proposed in claim 1 of the present application is not considered to be inventive within the meaning of PCT Articles 33(1) and 33(3) since this solution is only one of the possibilities that the person skilled in the art could choose, as the case may be, from among several obvious possibilities, to solve the problem posed without any inventive step being involved.

Additionally, it would appear clear to the person skilled in the art that the production of an image at constant orientation such as presented in document D1 (col. 2, line 53 - col. 3, line 4) presupposes the choice of a reference image.

Consequently, the subject matter of claim 1 does not involve an inventive step within the meaning of PCT Article 33(3).

3. CLAIM 2

The same reasoning as for claim 1 applies, *mutatis mutandis*, to the subject matter of independent claim 2, which, consequently also does not involve an inventive step within the meaning of PCT Article 33(3) and hence does not fulfil the conditions stated in PCT Article 33(1).

4. CLAIMS 3-7

Dependant claims 3-7 do not seem to contain any additional feature which, in combination with the subject-matter of any of the claims on which they depend, define a subject matter which satisfies the requirements of PCT Articles 33(1) and 33(3) in respect of inventive step, and for the following reasons:

4.1 Claim 3

The characteristic of claim 3 corresponding in that the means of control of the picture-taking apparatus consist of a gyroscopic system mounted aboard said flying body and sensitive to the rotation of the latter along its longitudinal axis is also proposed in document D1 (col. 2, line 53 - col. 3, line 4).

4.1 Claim 4

The characteristic of claim 4 corresponding in that the image processing means are stationed at the fixed post is also described in document D1 (col. 2, line 53 - col. 3, line 4).

4.2 Claim 5

The characteristic of claim 5 corresponding in that the means of linking between said picture-taking apparatus and said image processing means is effected by said means of linking between said flying body and said fixed post is described in document D1 (claim 1).

4.3 Claim 6

The characteristic of claim 6 corresponding in that the sequencing of the operation of said image processing means is controlled by said gyroscopic system by way of said means of linking between said flying body and said fixed post is described in document D2 (col. 1, line 52 - col. 2, line 2; col. 4, lines 5-8; claim 1). It is obvious to the person skilled in the art to apply this characteristic with a corresponding effect, in a system according to document D1 and thus to obtain a system according to claim 6.

4.4 Claim 7

The characteristic of claim 7 corresponds in that the flying body comprises means of illumination able to light said scene is described in document D3 (claim 1). It is obvious to the person skilled in the art to apply this characteristic with a corresponding effect, in a system according to document D1 and and thus to obtain a system according to claim 7. The subject matter of claim 7 consequently does not

involve an inventive step (PCT Article 33(1) and 33(3)).

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